International Application No PCT/CA2004/001040

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61F5/02

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ IPC 7 & A61F \end{tabular}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

### EPO-Internal

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages                                   | Relevant to claim No.                 |
|------------|--|---------------------------------------|
| Х          | US 5 950 628 A (DUNFEE MATTHEW J)<br>14 September 1999 (1999-09-14)  | 1-8,<br>25-27,<br>29,31,<br>32,40     |
|            | figures 1,4,5,9<br>column 17, line 4 - column 18, line 22  |                                       |
| <b>(</b>   | EP 0 864 308 A (CHANG IKCHUN)<br>16 September 1998 (1998-09-16)  | 1,2,4-8,<br>24-27,<br>29,32,<br>38,40 |
|            | figures 6,8,9,10A,10B,11 column 1, line 3 - line 14 column 4, line 30 - line 37 column 5, line 7 - column 6, line 52 |                                       |
|            | -/   |                                       |
|            | •  |                                       |

| X Further documents are listed in the continuation of box C.  | X Patent family members are listed in annex.  |  |
|---|---|--|
| "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filling date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filling date but later than the priority date claimed | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family |  |
| Date of the actual completion of the international search  18 November 2004   | Date of mailing of the International search report  1 Z. 02. 2005   |  |
| Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016  | Authorized officer  Josten, S   |  |

International Application No PCT/CA2004/001040

|            | TO A DOOL WELTO COMPLETE TO DE DEL EVALIT   | FC1/CA2004/001040     |  |  |  |  |  |
|------------|---|-----------------------|--|--|--|--|--|
|            | C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  |                       |  |  |  |  |  |
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |  |  |  |  |  |
| X          | US 6 237 602 B1 (FACKLAM ROY A ET AL) 29 May 2001 (2001-05-29) figures 1,2,4,5,7,10,10a column 3, line 29 - column 5, line 17 column 6, line 40 - line 63 | 1-7,17,<br>22-24      |  |  |  |  |  |
| . ·        | GB 1 119 904 A (GIOVANNI ZUMAGLINI) 17 July 1968 (1968-07-17) figures 1-3 page 2, line 62 - line 73   | 1,2,40                |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
| · .        |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |
|            |   |                       |  |  |  |  |  |

International application No. PCT/CA2004/001040

| Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:  |  |  |  |  |  |  |
| 1. X Claims Nos.: 69, 70 because they relate to subject matter not required to be searched by this Authority, namely:   |  |  |  |  |  |  |
| Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy: As can be seen from the description (see paragraphs 0002, 0003 and 0067), the methods according to claims 69 and 70 can be used for the treatment of back pain or scoliosis. |  |  |  |  |  |  |
| 2. Claims Nos.: 68 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:                              |  |  |  |  |  |  |
| see FURTHER INFORMATION sheet PCT/ISA/210   |  |  |  |  |  |  |
| 3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).   |  |  |  |  |  |  |
| Box III Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)  |  |  |  |  |  |  |
| This International Searching Authority found multiple inventions in this International application, as follows:   |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| see additional sheet  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| 1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.   |  |  |  |  |  |  |
| 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.   |  |  |  |  |  |  |
| As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| 4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:   |  |  |  |  |  |  |
| 1-45  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| Remark on Protest The additional search fees were accompanied by the applicant's protest.   |  |  |  |  |  |  |
| No protest accompanied the payment of additional search fees.   |  |  |  |  |  |  |

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 69, 70

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy: As can be seen from the description (see paragraphs 0002, 0003 and 0067), the methods according to claims 69 and 70 can be used for the treatment of back pain or scoliosis.

Continuation of Box II.2

Claims Nos.: 68

Claim 68 does not specify any concrete technial features apart from defining its subject-matter as an actuator or an orthosis. Thus, claim 68 is totally unclear.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-45

An actuator comprising an inflatable bladder having an inlet for inflating said bladder.

2. claims: 46-67

A fluid-operable actuator comprising four sheets of material, an innermost pair of the sheets to form one or more bladders, and an outermost pair of the sheets having asymmetrical stretch properties.

Information on patent family members

International Application No PCT/CA2004/001040

| Patent document<br>cited in search report | Publication<br>date | Patent family member(s)  | Publication date   |
|---|---------------------|--|--|
| US 5950628 A                              | 14-09-1999          | US 5724993 A US 5704904 A US 6237602 B1 AT 259199 T AU 699290 B2 AU 6382496 A CA 2228468 A1 DE 69631532 D1 DE 69631532 T2 EP 0837666 A1 IL 122495 A JP 2000507836 T NO 975754 A WO 9640036 A1 AU 6259698 A WO 9833456 A1 | 10-03-1998<br>06-01-1998<br>29-05-2001<br>15-02-2004<br>26-11-1998<br>30-12-1996<br>19-12-1996<br>18-03-2004<br>05-01-2005<br>29-04-1998<br>21-04-2002<br>27-06-2000<br>09-02-1998<br>19-12-1996<br>25-08-1998<br>06-08-1998 |
| EP 0864308 A                              | 16-09-1998          | CN 1192885 A ,C<br>EP 0864308 A1<br>JP 2911437 B2<br>JP 10305051 A<br>US 5980560 A   | 16-09-1998<br>16-09-1998<br>23-06-1999<br>17-11-1998<br>09-11-1999   |
| US 6237602 B1                             | 29-05-2001          | US 5950628 A AU 5462999 A EP 1152721 A2 WO 0007469 A2 AU 6259698 A WO 9833456 A1   | 14-09-1999<br>28-02-2000<br>14-11-2001<br>17-02-2000<br>25-08-1998<br>06-08-1998   |
| GB 1119904 A                              | 17-07-1968          | DE 1566367 A1<br>DE 6607056 U  | 12-02-1970<br>14-01-1971   |